## **NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**

## FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: Las Vegas Golf I, LLC

dba Angel Park Golf Club 241 S. Rampart Boulevard Las Vegas, Nevada 89145

for the

Angel Park Golf Courses (Palm Course & Mountain Course, 12-hole short

course and the 18-hole putting course)

241 S. Rampart Boulevard Las Vegas, Nevada 89145

Permit Number: NEV99003

**Location:** T. 20 S.,R 60E., Section 32; Latitude: 36° 10' 29"N., Longitude: 115°17'13"W.

<u>General</u>: The Angel Park Golf Courses receive tertiary treated, nitrified and disinfected effluent (reclaim water) from the Durango Hills Water Resource Center (DHWRC - NEV98005) which is used for irrigation of turf grass and landscaped areas. The DHWRC reclaim (reuse) water is blended with potable water to provide the course with the adequate volume of water required. The relative percentages of potable and reclaimed water vary with the seasonal irrigation demand.

Not within a well protection area.

Receiving Water Characteristics: Groundwater in the vicinity of the course is approximately 500 feet below ground surface. This depth was determined from Las Vegas Valley Water District well #076 which is located about two miles north of the course. Groundwater flow direction is reported to be due east. Due to the depth to groundwater, monitoring wells at the course are not required.

<u>Description of the Location of the Discharge</u>: This golf course consists of the 18-hole "Mountain Course", the 18-hole "Palm Course", a 12-hole par 3 short course, and an 18-hole putting course. The clubhouse is located at 100 S. Rampart Boulevard, Las Vegas, Clark County, Nevada. The facility has two irrigation reservoirs, and a number of decorative lakes throughout the "Palms Course". All lakes are supplied with reclaimed water through a supply pipeline. There are approximately 225 total acres of golf course greens, fairways and perimeter landscaping. The facility is supplied by the reclaim water supply line from the DHWRC north of the Angel Park Golf Club.

<u>Flow</u>: The permitted 30-day average flow is 3.41 MGD, and the maximum flow is 3.41 MGD which is the maximum anticipated amount for the hot summer months. The annual average usage will be approximately 1.75 MGD per month, due to lower usage in the cooler months.

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<u>Procedures for Public Comment</u>: The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a 30 day period following the date of the public notice by August 12, 2004. the comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period, and must indicate the interest of the person filing the request and the reasons why a hearing was warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

<u>Discharge Limitations</u>: As noted in Table I.1 below, the DHWRC will be providing the course with a high quality disinfected reclaim water to the golf course. The coliform requirement is set at 2.2 CFU or MPN/100 ml Total Coliform, 30-day average. Therefore, in accordance with NAC 445A.277, a buffer zone and control of public access are not required.

**TABLE I.1: Discharge Limitations** 

<u>PARAMETERS</u>	EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow:	3.41 MGD	3.41 MGD	Continuous	Flow meter
Total Coliform	2.2 CFU or MPN/100 ml	23 CFU or MPN/100 ml	Weekly	Discrete
Total Nitrogen as N <sup>(1)</sup>	Monitor and Report mg/L  Monitor and Report mg/L		Monthly	Calculate
			Monthly	Composite

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Total Kjeldahl Nitrogen as N			
Total Oxidized Nitrogen as N (Nitrate + Nitrite)	Monitor and Report mg/L	Monthly	Composite
Ammonia as N	Monitor and Report mg/L	Monthly	Composite
Total Nitrogen lbs/ac/year:	220 lb/ac/year	Annual	Calculate

<sup>(1)</sup> Total Nitrogen as N can be reported as the sum of Total Oxidized Nitrogen and Total Kieldahl Nitrogen

CFU = Colony Forming Unit; MPN = Most Probable Number

Samples taken in compliance with the monitoring requirements specified in Table I.1 are collected and analyzed by DHWRC and reported by the Permittee. The quality of the effluent used by the Permittee may be reported as calculated values based upon the blend of treated effluent and Las Vegas Valley Water District (LVVWD) water.

Monitoring requirements may be satisfied by data collected by the Northwest Water Resource Center and Analyzed by the LVVWD. Discharge Monitoring Reports are to be submitted by the Permittee. Copies of backup data of the water quality calculation summaries are to be maintained at the golf course's reuse site.

**Schedule of Compliance :** The Permittee shall implement and comply with the provisions of the following Schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the Schedule

- a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit;
- b. The Permittee, or it's Agent shall adequately address any and all updates to the EMP as a revision of the EMP. The Permittee shall not reuse treated effluent prior to having an approved Final EMP per NAC 445A.275; and
- c. All compliance deliverables shall be submitted to Mr. Nadir Sous, NDEP-LV, 1771 East Flamingo Road, Suite 121-A, Las Vegas, Nevada 89119.
- d. The Permittee shall provide the Division with the documentation updates that notification required in permit condition I.B.13., has been complied with **prior to continued use of treated effluent (recycled water).**

Rationale for Permit Requirements: Reclaimed water monitoring is required to assess the level of treatment being provided by the DHWRC, to assess the quality of blended water delivered to the courses by the LVVWD, to assess the management of recycled water usage,

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and to protect the local groundwater quality. Total Coliform and nitrogen species are required for monitoring the quality of reclaim water being applied, and for the protection of human health and the environment.

<u>Determination:</u> The Division has made the determination to renew (issue) the proposed permit for a five-year(5) period.

Prepared by: Icyl C.Mulligan, ES MS June 2004